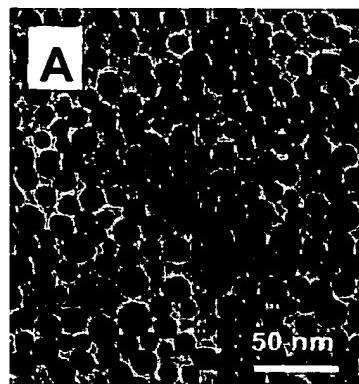
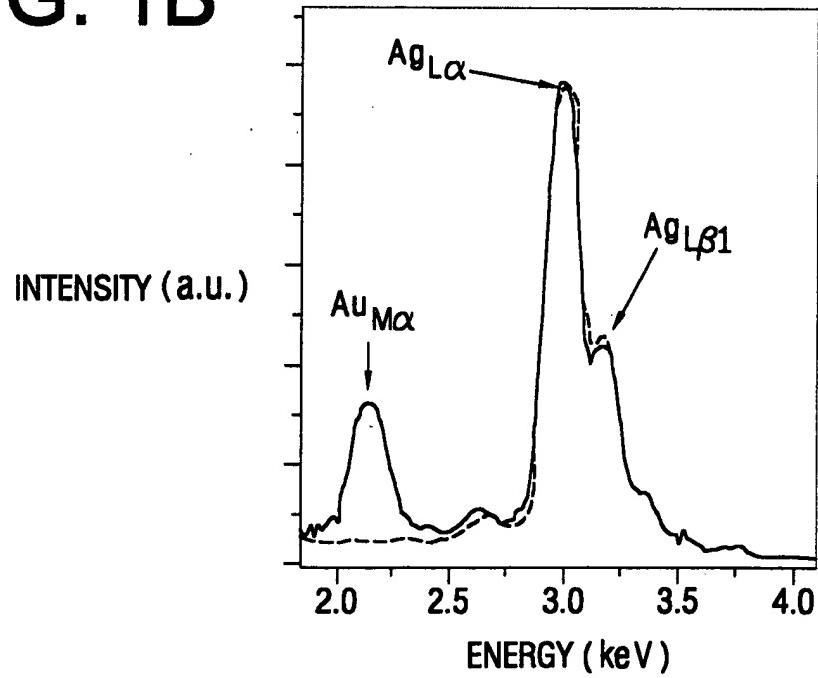


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**FIG. 1A**

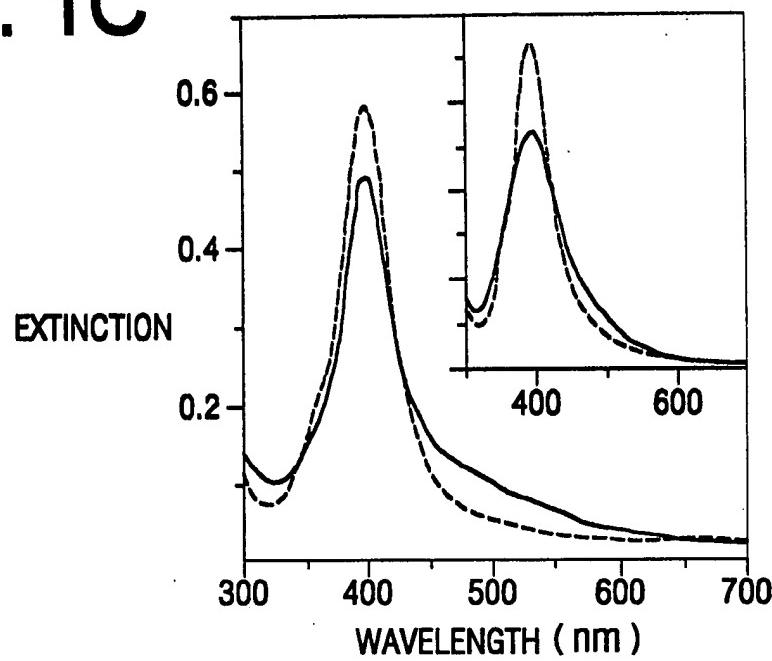


**FIG. 1B**

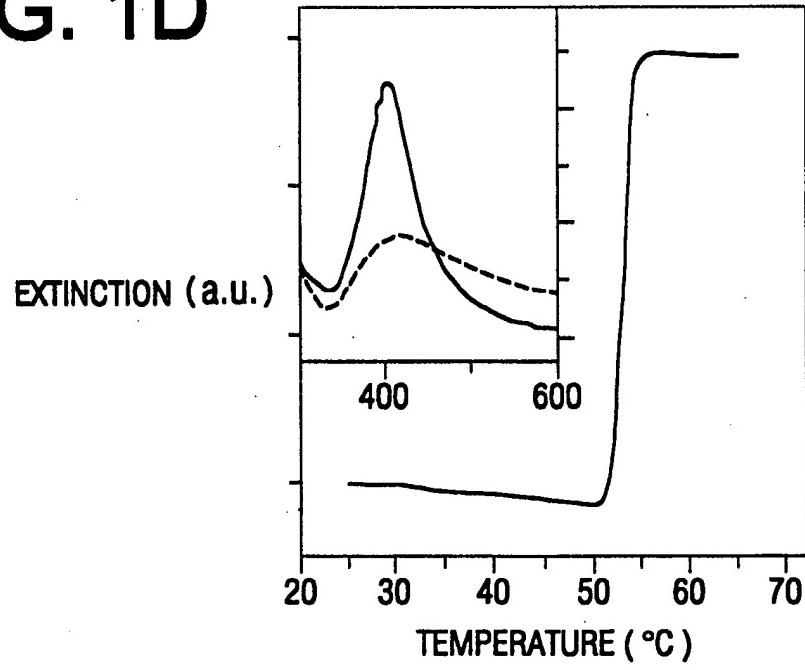


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**FIG. 1C**



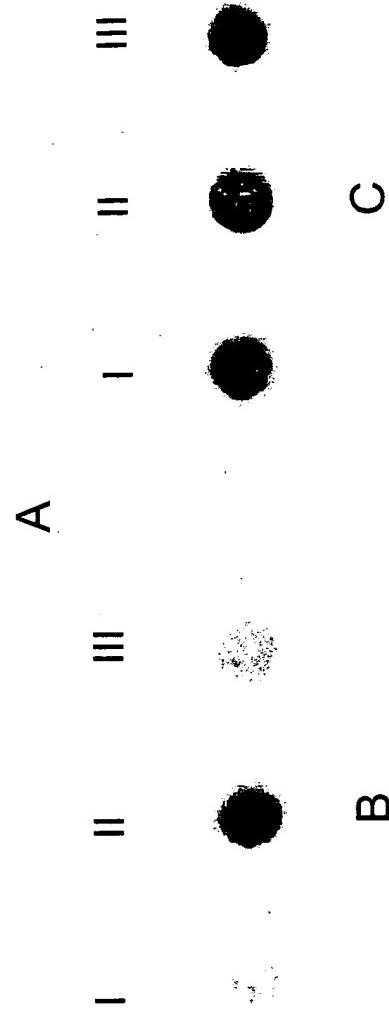
**FIG. 1D**



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# FIG. 2

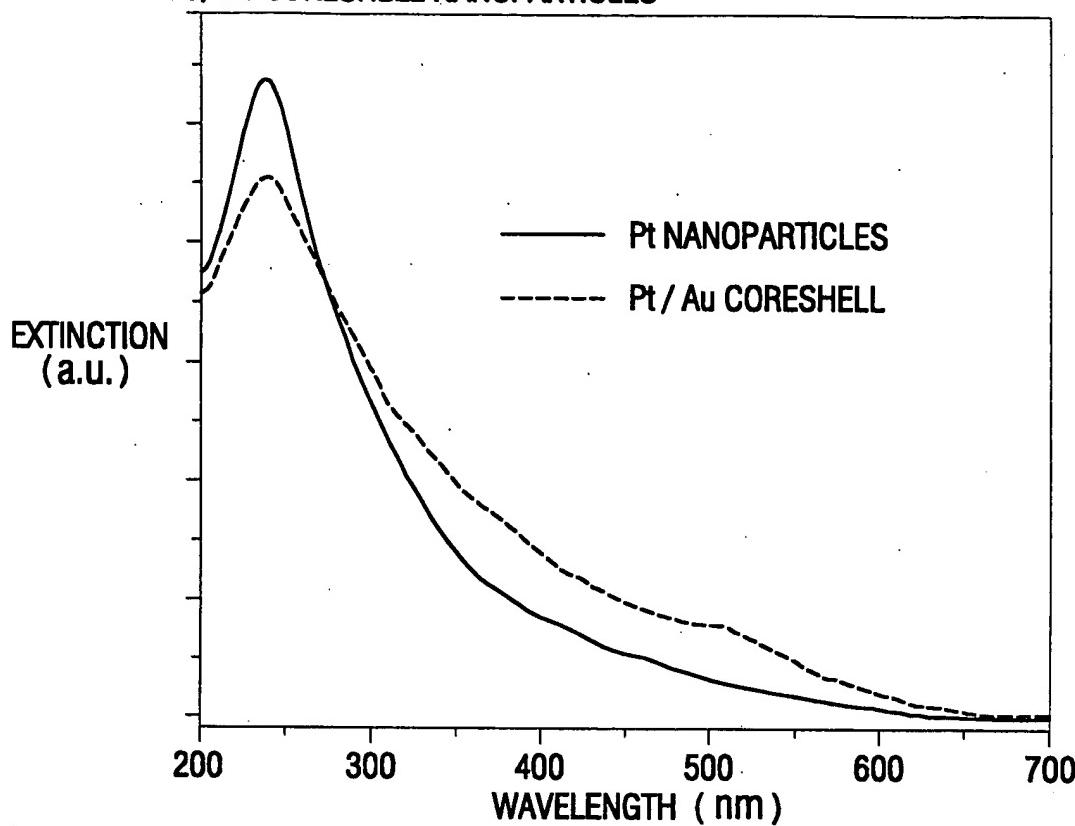
(CS)-S-(A)<sub>20</sub>-CTC-CCT-AAT-AAC-AAT TTA-TAA-CTA-TTC-CTA-(A)<sub>20</sub>-S-CS  
5'-GAG-GGA-TTA-TTG-TTA-AAT-ATT-GAT-AAG-GAT-3"



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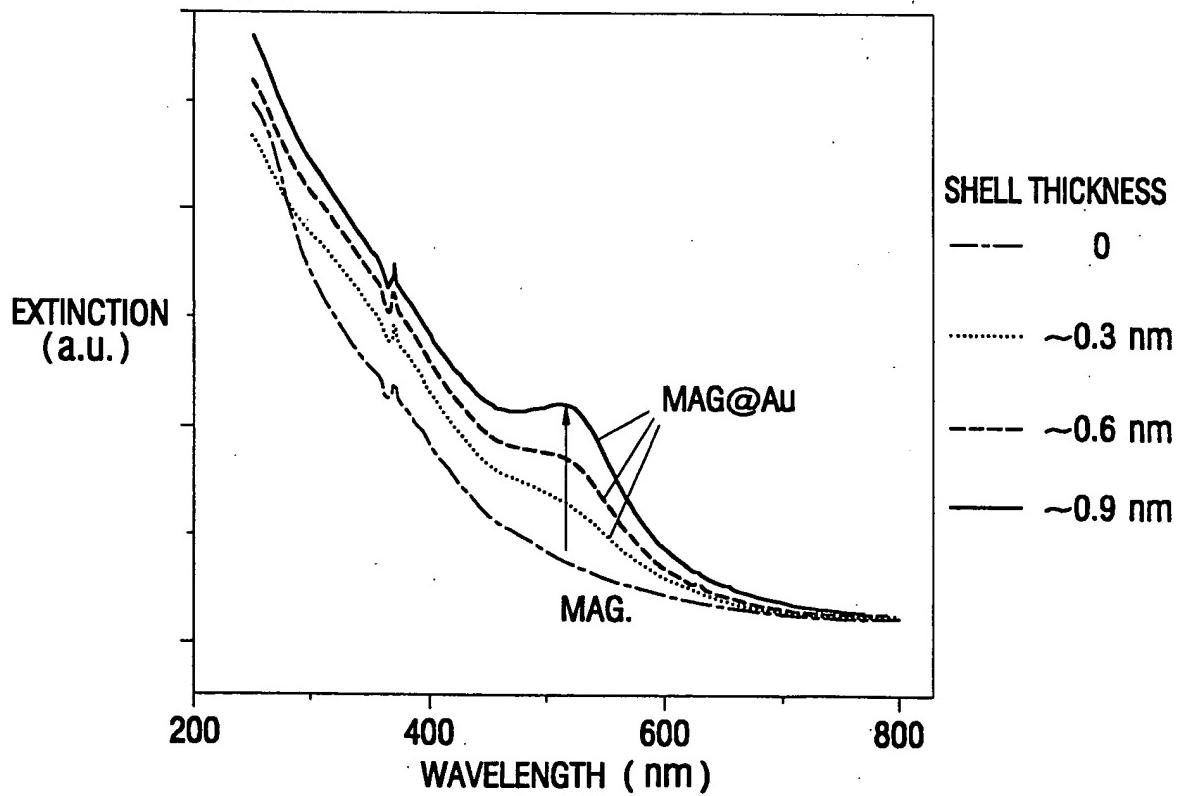
UV-VIS SPECTRA OF Pt AND  
Pt / Au CORESHELL NANOPARTICLES

FIG. 3



GROWTH OF Au ON THE SURFACE OF  
 $\text{Fe}_3\text{O}_4$  NANOPARTICLES

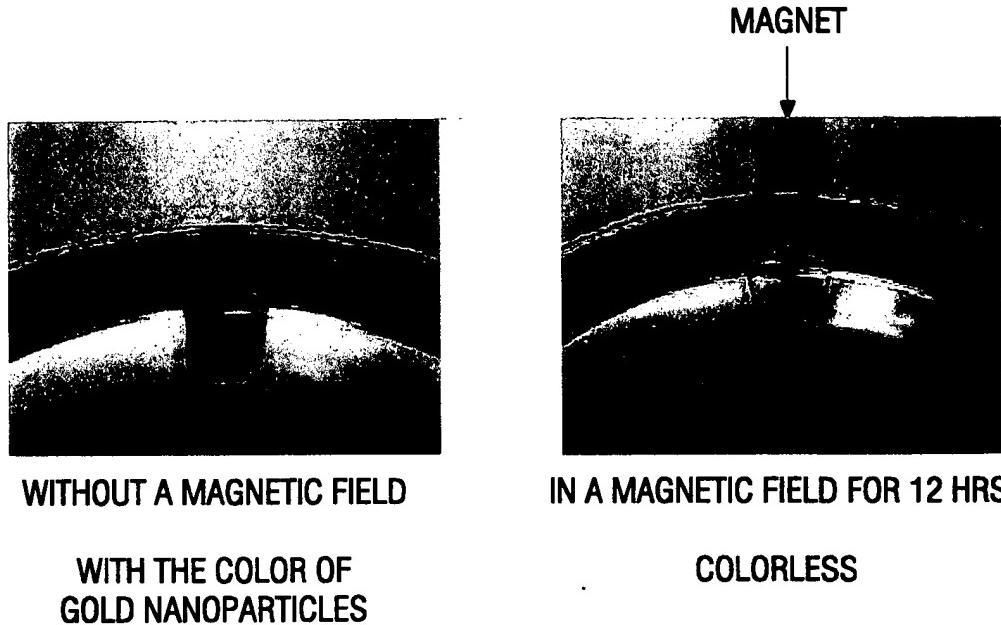
FIG. 4



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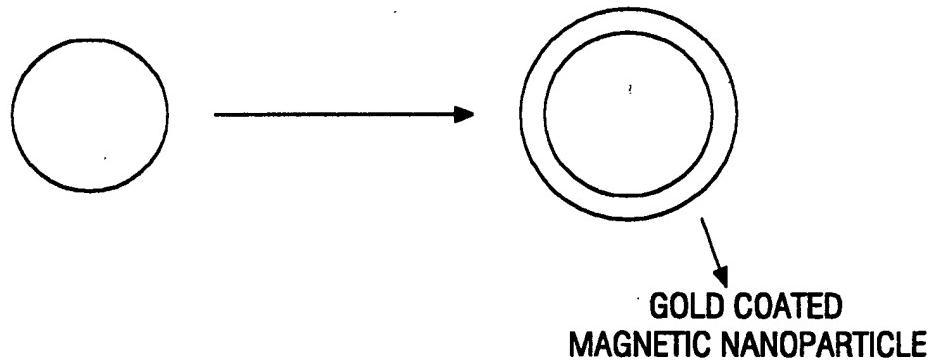
## FIG. 5

### MAGNETIC PROPERTIES OF GOLD COATED $\text{Fe}_3\text{O}_4$ NANOPARTICLES



## FIG. 6

### CORESHELL APPROACH TO MAGNETIC GOLD NANOPARTICLES



A: METAL OXIDES MAGNETIC CORES:  $\text{Fe}_3\text{O}_4, \text{Co}_3\text{O}_4$

B: PURE METAL CORES: Fe, Co, Ni...

C: ALLOY METAL CORES: FePt, FeAu

FIG. 7

